1 **BODY MEMBER PRINTING (E.G., FINGERPRINTING, ETC.)**

2.1 **MEDICAL OR DENTAL PURPOSE PRODUCT; PARTS; SUBCOMBINATIONS; INTERMEDIATES (E.G., BALLOON CATHETER, SPLINT)**

2.11 .Analysis, diagnosis, measuring, or testing product (e.g., specimen preparation, microscope slide smearing)

2.12 ..For contacting living body or transfusing bodily fluid (e.g., endoscope, electrode, thermometer, probe)

2.13 ..Layer formed contains chemical reagent or chemically reacts with substrate (e.g., cell stain or fix, pH paper, immobilized antigen)

2.14 .Particulate or unit-dosage-article base (e.g., tablet, pill, pellet, capsule, liposome, powder, controlled-release implant, suppository; excluding transdermal patch)

2.15 ..Fluidized bed utilized

2.16 ...Retarded or controlled-release layer produced (e.g., enteric)

2.17 ...Significant color or other intended appearance altering layer formed (e.g., shining, indicia)

2.18 ..En masse rotating means employed (e.g., rotating pan, tumbling)

2.19 ...Retarded or controlled-release layer produced (e.g., enteric)

2.2 ...Significant color or other intended appearance altering layer formed (e.g., shining, indicia)

2.21 ..Retarded or controlled-release layer produced (e.g., enteric)

2.22 ..Gelatin matrix layer produced

2.23 ..Significant color or other intended appearance altering layer formed (e.g., shining, indicia)

2.24 .Implantable permanent prosthesis (i.e., artificial body member) (e.g., pacemaker, lens, cornea, glaucoma shunt, heart valve, muscle, spinal disc, breast, internal organ)

2.25 ..Liquid conveying (e.g., vascular, arterial, bile duct, urethra)

2.26 ..For mineralized body part (e.g., bone, tooth, crown, hip)

2.27 ...Inorganic oxygen-containing compound containing layer formed (e.g., hydroxyapatite, ceramic, glass)

2.28 .Device for creating or holding open an unnatural opening in a membrane or organ (e.g., syringe, scalpel, drainage tube)

2.29 .Dental product (e.g., floss, denture, orthodontia wire)

2.3 .Fluid barrier or fluid transporting product, other than merely absorbing (e.g., surgical glove, condom, lined diaper, membrane filter, IV tubing, cannula, dialysis membrane, urinary catheter)

2.31 .Flexible web, sheet, film, or filament base (e.g., fabric, bandage, suture, transdermal patch, orthopedic cast tape)

4 **PLANT MEMBER OR ANIMAL SPECIMEN COATING**

5 **RADIOACTIVE BASE OR COATING**

6 .Particles or nuclear reactor fuel elements coated

7 **FRAUD OR TAMPER DETECTING**

8 **MEASURING, TESTING, OR INDICATING**

9 .Thickness or uniformity of thickness determined

10 ..Electrical or optical

11 **FRICTIONAL APPLICATION (I.E., RUBBING SOLID COATING MATERIAL ON BASE)**

446 **SPRAY COATING UTILIZING FLAME OR PLASMA HEAT (E.G., FLAME SPRAYING, ETC.)**

447 .Organic containing coating

448 .Nonuniform or patterned coating

449 .Continuous feed solid coating material (e.g., wire, rod, or filament, etc.)
450 .Inorganic carbon containing coating, not as steel (e.g., carbide, etc.)
451 ..Additionally containing nickel, cobalt, or iron as free metal or alloy
452 .Silicon containing coating
453 .Metal oxide containing coating
454 ..Superposed diverse or multilayer similar coatings applied
455 .Metal or metal alloy coating
456 ..Aluminum, nickel, cobalt, or iron metal or alloy containing coating
457 **DIRECT APPLICATION OF ELECTRICAL, MAGNETIC, WAVE, OR PARTICULATE ENERGY**
458 .Electrostatic charge, field, or force utilized
459 ..Fluidized bed utilized
460 ...Ionization or corona discharge utilized
461 ...Heating or fusing applied coating
462 ..Flock or fiber applied
463 ...Pile- or nap-type surface formed
464 ....Heating, drying, or cooling adhesive surface
465 ....Organic substrate specified (e.g., fabric, etc.)
466 ..Nonuniform or patterned coating (e.g., ink jet printing, etc.)
467 ...Edging or striping
468 ...Mask or stencil utilized
469 ...Coating material consists of charged particles (e.g., paint, pigment, dye, etc.)
470 ..Superposed diverse or multilayer similar coatings applied
471 ..Applying coatings to opposite sides of a substrate (excluding processes where all coating is by immersion)
472 ..Positioning, orientation, or application of nonsprayed, nonatomized coating material solely by electrostatic charge, field, or force
473 ...Inorganic substrate
474 ...Solid particles applied
475 ..Solid particles or atomized liquid applied
476 ...Inside hollow articles
477 ...Articles or substrates sequentially moved past atomizing source
478 ....Collection of off-target or fugitive coating material
479 ....Utilizing multiple spray sources (e.g., atomizers)
480 ....Movable atomizer or spray source (e.g., spray source or atomizer rotates, reciprocates, oscillates, etc.)
481 ....Rotatable base or support for substrate
482 ...Running or indefinite length substrate
483 ...Utilizing apparatus to atomize and electrostatically charge liquid coating material (e.g., charging electrode adjacent spray source, etc.)
484 ....Rotatable atomizer or spray source
485 ...Coating contains organic material
486 ....Inorganic substrate
487 .Polymerization of coating utilizing direct application of electrical, magnetic, wave, or particulate energy (i.e., including cross-linking, curing, and hardening of organics)
488 ..Plasma initiated polymerization
489 ...Organosilicon containing coating
490 ...Flurocarbon containing coating
491 ...Organic substrate
492 ..Multiple applications of identical radiation energy source to polymerize (e.g., pulse, flash, lamp, etc.)
493 ..Application of plural diverse energy sources to polymerize (e.g., electromagnetic wave plus resistance heat, ultraviolet wave plus infrared wave, etc.)

494 ..Gloss control (e.g., light scattering, etc.)
495 ..Polymerization involving the control of oxygen containing gas as an inhibitor (e.g., air, etc.)
496 ..High energy electromagnetic radiation or high energy particles utilized (e.g., gamma rays, X-rays, atomic particles, i.e., alpha rays, beta rays, electrons, etc.)
497 ...Vapor deposition utilized
498 ...Immersion, partial immersion, spraying, or spin coating utilized (e.g., dipping, etc.)
499 ....Natural cellulose substrate
500 ...Coating material includes colorant or pigment
501 ...Textile, fiber, or wire coated or impregnated
502 ...Magnetic recording medium formed
503 ...Organosilicon containing coating material
504 ...Nonuniform or patterned coating (e.g., mask, printing, etc.)
505 ...Coating is adhesive or intended to be made adhesive (e.g., release sheet or coating, etc.)
506 ...Benzene ring or nitrogen containing coating material
507 ....Styrene or carboxamide group containing coating material (e.g., urea, urethane, etc.)
508 ..Low energy electromagnetic radiation utilized (e.g., UV, visible, IR, microwave, radio wave, actinic, laser, etc.)
509 ...Vapor deposition utilized
510 ...Nonuniform or patterned coating (e.g., mask, printing, textured, etc.)
511 ....Printing ink utilized
512 ...Immersion, partial immersion, spraying, or spin coating utilized (e.g., dipping, etc.)
513 ...Textile or fiber coated or impregnated
514 ...Coating material includes colorant or pigment
515 ...Organosilicon containing coating material
516 ...Coating is adhesive or is intended to be made adhesive (e.g., release sheet or coating, etc.)
517 ...Coating includes specified rate affecting material
518 ....Inorganic substrate
519 ....Keto or aldehyde containing group is part of the rate affecting coating material (e.g., benzoin, benzophenone, acetaldehyde, etc.)
520 ...Benzene ring or nitrogen containing coating material
521 ...Radiation as heat source (e.g., radiant energy, etc.)
522 ..Resistance or induction heat-initiated polymerization
523 .Ion plating or implantation
524 ..With simultaneous sputter etching of substrate
525 ..Organic material present in substrate, plating, or implanted layer
526 ..Nonuniform or patterned ion plating or ion implanting (e.g., mask, etc.)
527 ..Silicon present in substrate, plating, or implanted layer
529 ..Inorganic oxide containing plating or implanted material
530 ..Inorganic metal compound present in plating or implanted material (e.g., nitrides, carbides, borides, etc.)
528 ..Metal or metal alloy substrate
531 ..Metal or metal alloy plating or implanted material
532 .Pretreatment of substrate or post-treatment of coated substrate
533 ..Ionized gas utilized (e.g., electrically powered source, corona discharge, plasma, glow discharge, etc.)
534 ...Cleaning or removing part of substrate (e.g., etching with plasma, glow discharge, etc.)
535 ...Plasma (e.g., cold plasma, corona, glow discharge, etc.)
536 ....Organic substrate
537 .....Metal containing coating
538 .....Textile or fiber coated or impregnated

539 ....Oxygen containing atmosphere
540 ..Arc or electrical discharge
541 ..Drying
542 ...Infrared or radiant heating
543 ..Induction or dielectric heating
544 ...Organic coating containing material
545 ..Resistance heating
546 ...Metal or metal alloy containing coating
547 ..Magnetic field or force utilized
548 ...Magnetic recording medium or device formed
549 ....Running length substrate
550 ...Magnetizable powder, flakes, or particles utilized
551 ..High energy electromagnetic radiation or high energy particles utilized (e.g., gamma ray, X-ray, atomic particle, i.e., alpha ray, beta ray, high energy electron, etc.)
552 ...Nonuniform or patterned coating
553 ..Low energy electromagnetic radiation (e.g., microwave, radio wave, IR, UV, visible, actinic, laser, etc.)
554 ...Laser
555 ....Nonuniform or patterned coating
556 .....Metal or metal alloy substrate
557 ...Thermal processes (e.g., radiant heat, infrared, etc.)
558 ....Ultraviolet light
559 ....Fusing, curing, or annealing (e.g., ceramics, etc.)
560 ..Sonic or ultrasonic (e.g., cleaning or removing material from substrate, etc.)
561 .Pretreatment of coating supply or source outside of primary deposition zone or off site
562 ..Electric discharge (e.g., corona, glow discharge, etc.)
563 ...Silicon containing coating material
564 ...Metal, metal alloy, or metal oxide containing coating material
565 ..Sonic or ultrasonic (e.g., vibratory energy, etc.)
566 ..Electron irradiation (e.g., e-beam evaporation, etc.)
567 ...Silicon or metal oxide coating (e.g., glass, etc.)
568 ..Silicon containing coating supply or source
569 .Plasma (e.g., corona, glow discharge, cold plasma, etc.)
570 ..Utilizing plasma with other nonionizing energy sources
571 ...With magnetic enhancement
572 ...Light as energy source
573 ...With heated substrate
574 ...Silicon containing coating
575 ..Generated by microwave (i.e., 1mm to 1m)
576 ..Metal, metal alloy, or metal oxide coating
577 ..Inorganic carbon containing coating material, not as steel (e.g., carbide, etc.)
578 ..Silicon containing coating material
579 ...Silicon oxides or nitrides
580 .Electrical discharge (e.g., arcs, sparks, etc.)
581 .Chemical deposition from liquid contiguous with substrate via electron beam or light (e.g., photochemical liquid deposition, etc.)
582 .Photoinitiated chemical vapor deposition (i.e., photo CVD)
583 ..Silicon containing coating
584 ..Metal, metal alloy, or metal oxide coating
585 .Chemical vapor deposition (e.g., electron beam or heating using IR, inductance, resistance, etc.)
586 ..Pyrolytic use of laser or focused light (e.g., IR, UV lasers to heat, etc.)
587 ..Resistance or induction heating
588 ...Silicon or semiconductor material containing coating
589 ....Silicon carbide
590 ...Boron, nitrogen, or inorganic carbon containing coating
591 .Induction or dielectric heating
592 .Resistance heating
593 ..Vapor deposition employing resistance heating of substrate or coating material
594 ..Immersion or partial immersion

595 .Electromagnetic or particulate radiation utilized (e.g., IR, UV, X-ray, gamma ray, actinic, microwave, radio wave, atomic particle; i.e., alpha ray, beta ray, electron, etc.)
596 ..Laser or electron beam (e.g., heat source, etc.)
597 ...Metal or metal alloy containing coating material applied
598 .Magnetic field or force utilized
599 ..Magnetic recording medium or device formed
600 .Sonic or ultrasonic
601 ..Immersion bath utilized
58 **ELECTRICAL PRODUCT PRODUCED**
59 .Welding electrode
60 ..Post-treating with solid treating member
61 ..Metal coating or Group IIA metallic compound containing coating
62 .Superconductor
63 ..Nonuniform coating
64 .Fluorescent or phosphorescent base coating (e.g., cathode-ray tube, luminescent screen, etc.)
65 ..X-radiation properties
66 ..Electroluminescent lamp
67 ..Fluorescent lamp
68 ..Multicolor or mosaic (e.g., color T.V. tube, etc.)
69 ..Vapor deposition
70 ...Nonmetallic coating formed by vapor deposition
71 ..Particles applied
72 ..Rotating the base
73 ..Settling out of liquid
74 .Photoelectric
75 ..Mosaic or nonuniform coating
76 ..Coating is selenium, tellurium, or compound thereof
77 .Electron emissive or suppressive (excluding electrode for arc)
78 ..Vapor deposition or spraying
79 .Condenser or capacitor
80 ..Electrolytic or barrier layer type
81 ..Vacuum or pressure utilized
96.1 .Integrated circuit, printed circuit, or circuit board
96.2 ..Protective coating (e.g., encapsulating, etc.)
96.3 ...Electromagnetic wave energy shield (e.g., electromagnetic wave shield (EWS), etc.)
96.4 ...Conformal (e.g., thin film <.02mm thick, etc.)
96.5 ...Mechanical shock, stress, or physical damage absorbing or shielding (e.g., scratch or puncture-resistant coating, etc.)
96.6 ...Barrier to diffusion of specific fluid (e.g., silicone rubber, selectively permeable membrane which excludes water or moisture, etc.)
96.7 ..Using mist or aerosol
96.8 ..Vapor or gas deposition
96.9 ..Front and back of substrate coated (excluding processes where all coating is by immersion)
97.1 ..Multilayer
97.2 ...Coating hole wall
97.3 ...Nonuniform or patterned coating
97.4 ....With posttreatment of coating or coating material
97.5 .....Polymer deposited
97.6 ...With posttreatment of coating or coating material
97.7 ..Coating hole wall
97.8 ...With pretreatment of substrate
97.9 ....Immersion metal plating from solution (e.g., electroless plating, etc.)
98.1 .....Activating or catalyst pretreatment
98.2 ...With posttreatment of coating or coating material
98.3 ....Heating (e.g., curing, etc.)
98.4 ..Nonuniform or patterned coating
98.5 ...With pretreatment of substrate
98.6 ..With pretreatment of substrate
98.7 ...Swelling
98.8 ...Etching or roughening
98.9 ...Heating
99.1 ...Activating or catalyst pretreatment
99.2 ..With posttreatment of coating or coating material
99.3 ...Planarization
99.4 ...Polymer deposited
99.5 ..Immersion metal plating from solution (e.g., electroless plating, etc.)

100 .Piezoelectric properties
101 .Resistor for current control (excludes heating element)
102 ..Nonuniform coating
103 ..Applying superposed diverse coatings or coating a coated base
104 .Motor stator or core for winding
105 .Hollow article
106 ..Glass (e.g., light bulb, etc.)
107 ...Vapor deposition
108 .Transparent base
109 ..Vapor deposition
110 ..Spraying
111 .Filament for lamp or tube
112 ..Carbon filament
113 .Carbon base
114 ..Brushes
115 .Fuel cell part
116 .Coil or winding
117 .Wire conductor
118 ..Applying superposed coatings or coating a coated base
119 ..Foam, cellular, or natural rubber coating
120 ..Heat utilized
121 .Cellulosic or fibrous base (e.g., wood, paper, etc.)
122 .Carbon coating
123 .Metal coating
124 ..Vapor deposition or utilizing vacuum
125 ..Silver, gold, platinum, or palladium
126.1 .Metallic compound coating
126.2 ..Glass or ceramic base or coating
126.3 ..Metal oxide, peroxide, or hydroxide coating
126.4 ...Metal is Al
126.5 ...Metal is Au, Ag, Pt, Pd, Ru, Rh, Os, Ir
126.6 ...Metal is Ni, Fe, or Co
127 **MAGNETIC BASE OR COATING**
128 .Magnetic coating
129 ..With pretreatment of base
130 ..With post-treatment of coating or coating material
131 ..Applying superposed diverse coating or coating a coated base
132 ..Metal coating
133 **MOLD COATING**
134 .Sand mold
135 .Metal mold
136 **COATING PAVEMENT OR THE EARTH (E.G., ROADMAKING, ETC.)**
137 .Striping, marking, or increasing reflectivity
138 .Asphalt, bitumen, oil, or tar containing coating
139 ..Rolling
140 **RESTORING OR REPAIRING**
141 .Carbon paper or inked ribbon
142 .Metal article
143 **STENCIL BLANK MAKING**
144 **HECTROGRAPHIC OR COPYING SURFACE MAKING**
145 **LATENT IMAGE FORMED OR DEVELOPED**
146 **TRANSFER OR COPY SHEET MAKING**
147 .Decal or embossing foil type (i.e., continuous film transfers)
148 ..Heat sensitive
149 ..Fluid releasable
150 .Reactive components
151 ..Heterocyclic organic compound component
152 .Coating opposite sides or forming plural or nonuniform coats
153 .Carbon paper type
154 **REMOVABLE PROTECTIVE COATING APPLIED**
155 .Organic base
156 .Metal base
157 **FLUORESCENT OR PHOSPHORESCENT COATING**
158 .Optical brightening
159 **INCANDESCENT MANTLE PRODUCED**
160 **COATING HAS X-RAY, ULTRAVIOLET, OR INFRARED PROPERTIES**
161 **TRANSPARENCY OR TRANSLUCENCY INCREASED (E.G., MAKING WINDOW ENVELOPES, ETC.)**
162 **OPTICAL ELEMENT PRODUCED**
163.1 .Polarizer, windshield, optical fiber, projection screen, or retroreflector
163.2 ..Optical fiber, rod, filament, or waveguide
163.3 ..Projection screen
163.4 ..Retroreflector (e.g., light reflecting small spherical beads, etc.)
164 .Transparent base
165 ..Glass
166 ...Vapor depositing

167 ....Silicon compound coating (e.g., quartz, etc.)
168 ...Spraying
169 ...Immersion
170 **DELUSTERING FABRIC OR YARN**
171 **WITH STRETCHING OR TENSIONING**
172 .Running lengths
173 ..Lateral stretching
174 ..Particles or fibers applied
175 ..Cord, thread, yarn, or wire
176 ..Textile fabric
177 **WITH WINDING, BALLING, ROLLING, OR COILING**
178 .Metal or glass base (e.g., wire, etc.)
179 .Paper or felt base
180 **SOLID PARTICLES OR FIBERS APPLIED**
181 .Interior or hollow article coating
182 ..Fluidized bed utilized
183 ..Rotating the base
184 .Nonuniform speed or nonrectilinear base motion
185 .Fluidized bed utilized
186 .Roofing produced
187 ..With cutting
188 ..Localized different areas produced
189 .Uniting particles to form continuous coating with nondiscernible particles
190 ..Metallic compound particles
191 ..Metal particles
192 ...Aluminum, copper, or zinc particles
193 ..Vitrifiable particles
194 ..Roller utilized
195 ..Synthetic resin particles
196 .Plural direction application of coating materials or simultaneously applying particles and binder from different sources
197 .Localized different areas produced (e.g., printing, etc.)
198 ..Deforming the base or coating or removing part of the coating
199 ..Silicon compound, metal, or metallic compound containing particles applied
200 ..Flock or fibers applied
201 .Plural particulate materials applied
202 .Applying superposed diverse coatings or coating a coated base
203 ..Coating over the applied coating of particles
204 ..Silicon compound containing particles (e.g., sand, etc.)
205 ..Metal or metallic compound containing particles
206 ..Flock or fibers applied
207.1 **COATING REMAINS ADHESIVE OR IS INTENDED TO BE MADE ADHESIVE**
208 .Application to opposite sides of base
208.2 .Heat sensitive adhesive
208.4 .Pressure sensitive adhesive
208.6 ..Nonuniform coating (e.g., perforated, etc.)
208.8 ..Applying superposed diverse coatings or coating a coated base
209 **APPLICATION TO OPPOSITE SIDES OF SHEET, WEB, OR STRIP (EXCLUDING PROCESSES WHERE ALL COATING IS BY IMMERSION)**
210 .Nonuniform coating
211 .Roller applicator utilized
212 **PARTICLES, FLAKES, OR GRANULES COATED OR ENCAPSULATED**
213 .Fluidized bed utilized
213.3 .Solid encapsulation process utilizing an emulsion or dispersion to form a solid-walled microcapsule (includes liposome)
213.31 ..With post-treatment of encapsulant or encapsulating material (e.g., further coating, hardening, etc.)
213.32 ...Hardening
213.33 ....Using crosslinking agent
213.34 ..Solid-walled microcapsule formed by in situ polymerization
213.35 ..Solid-walled microcapsule formed from gelatin or derivative thereof
213.36 ..Solid-walled microcapsule formed from preformed synthetic polymer
214 .Applying superposed diverse coatings or coating a coated base
215 .Inorganic base
216 ..Metal base

217 ..Metal coating
218 ..Pigment containing coating
219 ...Silicon compound containing coating
220 ..Organic coating
221 ...Resin, rubber, or hardenable oil containing coating
222 .Resin base
223 **FLAME CONTACT**
224 .After coating
225 .Metal coating
226 **HEAT DECOMPOSITION OF APPLIED COATING OR BASE MATERIAL**
227 .Base material decomposed or carbonized
228 .Coating decomposed to form carbide or coating carbonized
229 .Coating decomposed to form metal
230 **INTERIOR OF HOLLOW ARTICLE COATING**
231 .Rotating the article
232 ..Removing excess coating material
233 ..Spraying
234 ..Metal base
235 .Removing excess coating material
236 .Spraying
237 .Coating by vapor, gas, mist, or smoke
238 .Vacuum or pressure utilized
239 .Metal base
240 **CENTRIFUGAL FORCE UTILIZED**
241 .Metal coating
242 **RUMBLING OR TUMBLING**
243 **FORAMINOUS PRODUCT PRODUCED**
244 .Filter, sponge, or foam
245 .Microporous coating (e.g., vapor permeable, etc.)
246 ..Coagulating or jelling the coating
247 .Metal base
248.1 **COATING BY VAPOR, GAS, OR SMOKE**
249.1 .Carbon or carbide coating
249.2 ..Chemical vapor infiltration (i.e., CVI) of porous base (e.g., fiber, fibrous web, etc.)
249.3 ..Fiber or fibrous web or sheet base (e.g., strand, filament, fabric, cloth, etc.)
249.4 ...Inorganic carbon base (e.g., graphite, etc.)
249.5 ..Boron and carbon containing coating (e.g., boron carbide, etc.)
249.6 ..Graphite coating
249.7 ..Diamond-like carbon coating (i.e., DLC)
249.8 ..Diamond coating
249.9 ...Patterned or non-uniform coating
249.11 ...Hot filament utilized
249.12 ...Diamond seed crystals utilized
249.13 ...Tungsten containing base
249.14 ...Superposed coatings (i.e., layered)
249.15 ..Silicon and carbon containing coating (e.g., silicon carbide, etc.)
249.16 ...Inorganic carbon base (e.g., graphite, etc.)
249.17 ..Metal carbide containing coating
249.18 ...Chromium (Cr), molybdenum (Mo), or tungsten (W) metal carbide containing coating
249.19 ...Titanium (Ti), zirconnium (Zr), or hafnium (Hf) metal carbide containing coating
250 .Metal coating
251 ..Moving the base
252 ..By decomposing metallic compound (e.g., pack process, etc.)
253 ...Halogen containing compound
254 .Wood base
255.11 .Base includes an inorganic compound containing silicon or metal (e.g., glass, ceramic, brick, etc.)
255.12 ..Chemical vapor infiltration (i.e., CVI) of porous base (e.g., fiber, fibrous web etc.)
255.13 ..Glaze coating produced
255.14 ..Organic compound containing coating
255.15 ..Plural coatings applied utilizing vapor, gas, or smoke
255.18 ..Silicon containing coating
255.17 ...Halogen containing coating, reactant, or precursor
255.19 ..Metal oxide containing coating
255.21 ..Base includes inorganic metal containing compound
255.22 ...Iron compound containing base (e.g., ferric oxide, etc.)

255.23 .Mixture of vapors or gases (e.g., deposition gas and inert gas, inert gas and reactive gas, two or more reactive gases, etc.) utilized
255.24 ..Fiber or fibrous web or sheet based (e.g., strand, filament, fabric, cloth, etc.)
255.25 ..Mixture contains liquid or solid particulate suspension
255.26 ..Coating formed by reaction of vaporous or gaseous mixture with a base (i.e., reactive coating of non-metal base)
255.27 ...Silicon containing coating
255.28 ..Coating formed from vaporous or gaseous phase reaction mixture (e.g., chemical vapor deposition, CVD, etc.)
255.29 ...Inorganic oxygen, sulfur, selenium, or tellurium (i.e., chalcogen) containing coating (e.g., phosphosilicate, silicon oxynitride, etc.)
255.31 ....Metal and chalcogen containing coating (e.g., metal oxide, metal sulfide, metal telluride, etc.)
255.32 .....Plural metal containing coating (e.g., indium oxide/ tin oxide, titanium oxide/ aluminum oxide, etc.)
255.33 .....Zinc (Zn), cadmium (Cd), or mercury (Hg), containing
255.34 .....Gallium (Ga), aluminum (Al), or indium (In) containing
255.35 .....Germanium (Ge), tin (Sn), or lead (Pb) containing
255.36 .....Titanium (Ti) or zirconium (Zr) containing
255.37 ....Silicon dioxide coating
255.38 ...Phosphorus or boron containing coating (e.g., aluminum boride, boron phosphide etc.)
255.39 ...Halogen or halogen compound containing reactant
255.391 ....Titanium compound containing coating (e.g., titanium carbonitride, titanium nitride, etc.)
255.392 ....Tungsten compound containing coating (e.g., tungsten silicide, etc.)
255.393 ....Silicon containing coating
255.394 ...Nitrogen containing coating (e.g., metal nitride, etc.)
255.395 ..Inorganic coating
255.4 .Base supplied constituent
255.5 .Moving the base
255.6 .Organic coating applied by vapor, gas, or smoke
255.7 .Plural coatings applied by vapor, gas, or smoke
256 **NONUNIFORM COATING**
257 .Wrinkled or crackled coating
258 .Applying superposed diverse coatings or coating a coated base
259 ..Including a masking coating
260 ..Handheld brush or absorbent applicator utilized
261 ..Final coating nonuniform
262 ...Variegated surface produced (e.g., mottled, stippled, wood grained, etc.)
263 ....Marbleized
264 ...Deforming the base or coating or removing a portion of the coating
265 ...Plural nonuniform coatings
266 ....Glass or ceramic base
267 ..Variegated surface produced (e.g., mottled, stippled, wood grained, etc.)
268 ...Marbleized
269 ..Glass or ceramic base
270 ..Deforming the base or coating or removing a portion of the coating
271 .Deforming the base or coating or removing a portion of the coating
272 ..Mask or stencil utilized
273 ..Fluid treating the coating (e.g., vapor treating, etc.)
274 ..Variegated surface produced (e.g., stippled, marbleized, mottled, wood grained, etc.)
275 ..Deforming the base
276 ...Simultaneously deforming the coating
277 ..Solid treating member contacts coating
278 ...Roller treating member
279 .Vitreous coating
280 .Variegated surface produced (e.g., mottled, wood grained, etc.)
281 ..Marbleized
282 .Mask or stencil utilized

283 .Crystalization or precipitation coating
284 .Edge or border coating
285 ..Paper or textile base
286 .Striping (i.e., forming stripes)
287 .Metal, glass, or ceramic base
288 .Paper or textile base
289 **WITH CUTTING, HOLDING, SEVERING, OR ABRADING THE BASE**
290 .Prior to coating
291 ..Wood base (e.g., injecting, etc.)
292 ..Inorganic base
293 .Rectilinear cutting to length
294 **VACUUM UTILIZED PRIOR TO OR DURING COATING**
295 .Metal base
296 .Organic base
297 ..Wood base
298 ...Creosote, wax, oil, asphalt, or bitumen coating
299 **WITH PRETREATMENT OF THE BASE**
300 .Shielding or spacing
301 .Preapplied reactant or reaction promoter or hardener (e.g., catalyst, etc.)
302 ..Resin, rubber, or hardenable oil containing coating
303 ...Cellulosic base
304 ..Metal coating (e.g., electroless deposition, etc.)
305 ...Nickel, copper, cobalt, or chromium coating
306 ....Organic base
307 .Etching, swelling, or dissolving out part of the base
308 ..Cellulosic base
309 ..Inorganic base
310 .Fluxing
311 ..Supernatant flux (floating)
312 ...Lead or tin coating
313 ..Lead or tin coating
314 .Heating or drying pretreatment
315 ..Steam utilized
316 ..Organic base
317 ...Wood base
318 ..Metal base
319 ...Metal coating
320 ....Aluminum coating
321 ....Zinc or spelter coating (e.g., galvanizing, etc.)
322 .Organic base
323 ..Natural protein containing base (e.g., silk, wool, leather, etc.)
324 ..Cellulosic base
325 ...Wood base
326 ...Paper base
327 .Metal base
328 ..Metal coating
329 ...Molten metal bath utilized
330 ..Vitreous coating
331 **WITH POST-TREATMENT OF COATING OR COATING MATERIAL**
332 .Deodorizing
333 .Plural film forming coatings wherein one coating contains a chemical treating agent for the other
334 .Oil or wax treatment of coating
335 .Solvent vapor treatment of coating
336 .Swelling agent or solvent applied to treat coating
337 .Chemical agent applied to treat coating
338 ..Proteinaceous coating
339 ..Cellulosic coating
340 ..Resin, resin precursor, rubber, or hardenable oil containing coating
341 ...Inorganic treating agent
342 ...Textile or cellulosic base
343 ..Inorganic coating
344 ...Silicon compound containing coating
345 .Coating material recirculation or regeneration
346 .Movement of work treats coating (e.g., vibrating, tilting, etc.)
347 ..Metal coating
348 .Gas jet or blast mechanically treats coating
349 ..Metal coating
350 .Vacuum or reduced pressure utilized
351 ..Wood base
352 .Liquid extraction of coating constituent or cleaning coating
353 ..With water
354 ...Drying subsequent to washing
355 .Solid treating member or material contacts coating
356 ..Die, blade, or sharp-edged tool
357 ...Metal coating

358 ...Organic coating
359 ..Roller, drum, or cylinder
360 ...Metal coating
361 ...Paper base (e.g., calendering, etc.)
362 ....Cast coating
363 ....Wax or oil containing coating
364 ....Casein or starch containing coating
365 ...Treating between rollers (e.g., calendering, etc.)
366 ....With heating (e.g., heated roller, etc.)
367 ..Metal coating
368 ..Brushing
369 ..Pressure treatment of coating (e.g., squeezing, etc.)
370 ...With heating (e.g., hot ironing, etc.)
371 ..Organic base
372.2 .Heating or drying (e.g., polymerizing, vulcanizing, curing, etc.)
373 ..Cells, foam, or bubbles formed
374.1 ..And cooling
374.2 ...Heating after cooling
374.3 ....Without intervening coating step
374.4 ...Fused or molten coating cooled
374.5 ....Liquid or solid cooling medium
374.6 ....Vacuum, vapor, or gas other than air utilized
374.7 ....Vitreous or glazed coating
375 ..Fusion or softening of coating
376.1 ...Inorganic coating
376.2 ....Metal oxide- or silicon-containing coating (e.g., glazed, vitreous enamel, etc.)
376.3 .....Metal-containing coating (e.g., cermet, etc.)
376.4 .....Metal base
376.5 .....Ferrous base
376.6 ....Metal-containing coating
376.7 .....Coating consists of metal
376.8 .....Metal base
377 ..Modified condition of atmosphere (e.g., steam, air movement, etc.)
378 ...Movement of atmosphere
379 ..Plural heating or drying steps
380 ...Metal or metallic compound containing coating
381 ...Textile or cellulosic base
382 ....Paper or natural cellulose base
383.1 ..Metal coating
383.3 ...Inorganic base
383.5 ....Fused oxide-containing base (e.g., ceramic, glass, etc.)
383.7 ....Metal base
384 ..Organic coating
385.5 ...Resin, resin precursor, rubber, or hardenable oil-containing coating
386 ....Epoxy or polyepoxide containing coating
387 ....Silicon compound containing coating
388.1 ....Metal base
388.2 .....Cross-linked or infusible coating
388.3 ......Aldehyde-containing precursor
388.4 .....Water-containing coating (i.e., aqueous dispersion, emulsion, or solution)
388.5 .....Nonaqueous dispersion
389 ....Proteinaceous base (e.g., wool, leather, etc.)
389.7 ....Glass base
389.8 .....Fiberglass base
389.9 ....Textile or cellulose base
391 .....Paper base
392 .....Natural cellulose base
393 ......Wood base
393.1 .....Antistatic properties increased
393.2 .....Wrinkle resistance of crease holding properties increased
393.3 .....Flame resistance increased
393.4 .....Antisoiling or water repellency increased
393.5 ....Resin, rubber, or elastomer base
393.6 ....Asbestos, ceramic, concrete, or masonry base
394 ...Textile or cellulosic base
395 ....Paper base
396 ....Natural cellulose base
397 .....Wood base
397.7 ..Inorganic silicon-containing coating
397.8 ...Alkali silicate
398.1 .Cooling
398.2 ..Utilizing solid member contacting base or coating (e.g., cooling roller, etc.)

398.3 ..Liquid utilized (e.g., quenching, spraying, etc.)
398.4 ..Vacuum, vapor, or gas other than air utilized
398.5 ..Movement of atmosphere
399 **BASE SUPPLIED CONSTITUENT**
400 .Resin or rubber base
401 **COMBINED**
402 **APPLYING SUPERPOSED DIVERSE COATING OR COATING A COATED BASE**
403 .Settable inorganic coating (e.g., cement, etc.)
404 .Metal coating
405 ..Metal base
406 ...Zinc coating
407.1 .Synthetic resin coating
407.2 ..Glass base
407.3 ...Fiberglass base
408 ..Wood base
409 ..Metal base
410 ...Epoxy or polyepoxide containing coating
411 ..Paper base
412 ..Textile or leather base
412.1 ..Nonfibrous organic base
412.2 ...Cellulose derivative base
412.3 ...Polyolefin base
412.4 ...Halogen-containing resin base
412.5 ...Polyester or alkyd resin base
413 .Natural rubber or derivative containing coating
414 .Protein or derivative containing coating (e.g., casein, glue, gelatin, etc.)
415 .Cellulosic coating
416 .Wax containing coating
417 .Natural resin, oil, or fat containing
418 ..Metallic compound-containing coating
419.1 .Metallic compound-containing coating
419.2 ..Oxide-containing coating
419.3 ...Superposed diverse oxide coatings
419.4 ....Vitreous coating
419.5 ...Organic coating
419.6 ...Vitreous coating
419.7 ..Boride, carbide, nitride, phosphide, silicide, or sulfide-containing coating
419.8 ..Organometallic or metal salt of organic compound-containing coating
420 **FALLING CURTAIN OF COATING MATERIAL UTILIZED (I.E., CURTAIN COATING)**
421.1 **SPRAYING**
422 .Heated coating material
424 .Moving the base
425 ..Rotating or inverting
426 .Ingredients supplied separately
427 .Inorganic coating material
427.1 .Using nozzle or projector supported or guided by base (e.g., work, workpiece, etc.) during coating
427.2 .With programmed control or using mechanized nozzle or projector (e.g., robotic sprayer, etc.)
427.3 .Moving nozzle or projector
427.4 .Polymer containing coating material
427.5 ..Metal base
427.6 ..Organic compound containing base
427.7 .Organic compound containing base
428.01 **ROLLER APPLICATOR UTILIZED (E.G., PADDING, ETC.)**
428.02 .Single roller applies plural layers of same coating material to base
428.03 .Roller composed of three or more layers used
428.04 .Tapered roller used
428.05 .Fibrous or porous surface roller used
428.06 .Grooved or textured surface roller used
428.07 .Resilient (e.g., rubber, etc.) surface roller used
428.08 ..Plural roller applicators used
428.09 ..Opposed, counter, or reverse surface movement at contact between roller applicator and base
428.1 ..Including using roller backup support for base
428.11 .Opposed, counter, or reverse surface movement at contact between roller applicator and base
428.12 ..And using transfer roller to feed coating material to roller applicator
428.13 .And roller end dams used
428.14 .And doctor or roller used to distribute coating material on roller applicator

428.15 ..And using transfer roller to feed coating material to roller applicator
428.16 ..And guiding base to follow surface curvature of roller applicator
428.17 ..Including using roller backup support for base
428.18 .Including using force to supply coating material to roller applicator
428.19 ..Through nozzle or projector
428.2 .Direct contact of roller applicator with coating material supply bath used
428.21 .Including using roller backup support for base
429 **BRUSH OR ABSORBENT APPLICATOR UTILIZED**
430.1 **IMMERSION OR PARTIAL IMMERSION**
431 .Molten metal or fused salt bath
432 ..Inert gas or nonoxidizing atmosphere utilized
433 ..Lead, zinc, or tin coating (e.g., galvanizing, etc.)
434.2 .Running lengths
434.3 ..Coating applied at surface of bath only
434.4 ..Base treated by solid member in bath (e.g., scraped, squeezed, etc.)
434.5 ..Coating material moved (e.g., agitated, circulated, etc.)
434.6 ..Cord, thread, yarn, wire, or rod
434.7 ...Extending through bath-containing wall
435 .Metal base
436 ..Metal coating
437 ...Chemical compound reducing agent utilized (i.e., electroless deposition)
438 ....Nickel coating
439 .Cellulosic base
440 ..Wood base
441 ...Creosote, wax, oil, asphalt, or bitumen containing coating
442 ..Wax, oil, asphalt, or bitumen containing coating
443 .Wax, oil, asphalt, or bitumen containing coating
443.1 .Chemical compound reducing agent utilized (i.e., electroless deposition)
443.2 .Inorganic base
444 **PRETREATMENT, PER SE, OR POST-TREATMENT, PER SE (WITHOUT CLAIMED COATING)**
445 **MISCELLANEOUS**

CROSS-REFERENCE ART COLLECTIONS

900 **CHEMICAL VAPOR INFILTRATION (I.E., CVI)**
901 **LIQUID SOURCE CHEMICAL DEPOSTION (I.E., LSCVD) OR AEROSOL CHEMICAL VAPOR DEPOSITION (I.E., ACVD)**
903 **FULLERENE TYPE BASE OR COATING**
902 **DIAMOND-LIKE CARBON COATING (I.E., DLC)**
904 .Utilizing low energy electromagnetic radiation (e.g., microwave, radio wave, IR, UV, visible, actinic laser, etc.)
905 .Utilizing ion plating or ion implantation
906 .Utilizing plasma (e.g., corona, glow discharge, cold plasma, etc.)

FOREIGN ART COLLECTIONS

FOR 000 **CLASS-RELATED FOREIGN DOCUMENTS**

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collections listed below. These Collections contain ONLY foreign patents or non-patent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

COATING BY VAPOR, GAS, OR SMOKE

FOR 100 .Carbon or carbide coating (427/249)
FOR 101 .Base includes inorganic silicon or metal containing compound (e.g., glass, ceramic, brick, etc.) (427/255)

FOR 102 .Mixture of vapors or gases utilized (427/255.1)
FOR 103 ..The resultant coating is a mixture or a compound formed from the mixture utilized (427/255.2)
FOR 104 ...The mixture utilized contains oxygen (427/255.3)
ELECTRICAL PRODUCT PRODUCED (427/58)
FOR 105 .Integrated circuit, printed circuit, or circuit board (427/96)
FOR 106 ..Coating hole walls (427/97)
FOR 107 ..Immersion metal plating from solution (e.g., electroless plating, etc.) (427/98)
FOR 108 ..Vapor deposition (427/99)
FOR 109 **SPRAYING (427/421)**
FOR 110 **ROLLER APPLICATOR UTILIZED (E.G., PADDING, ETC.) (427/428)**